Berlepsch and Peters on Birds from Curaçao. Having received a number of birds collected on Curaçao by Herr Peters, Graf von Berlepsch has made this collection the basis for an extended review of the relationships of the birds of this island. A synopsis of the previously existing literature referring to the avifauna of the island is followed by analyses of the birds found there, which show their continental and West Indian affinities. In explanation of the singular distribution of Conurus pertinax, found only on Curaçao and St. Thomas, it is suggested that the bird may have been introduced on the latter island, a not unreasonable supposition.

The nineteen species given from the island are very fully annotated. Careba uropygialis, Buteo albicandatus colonus, and Falco sparverius brevipeunis are descibed as new. The list is concluded by a synoptical table which readily shows the distribution and relationships of Curaçaon birds.

Herr Peter's field-notes refer to fifty-one species of which only eighteen are represented in the collection.—F. M. C.

Hartert on Birds from Aruba, Bonaire and Curação.²—A revolution having prevented Mr. Hartert from visiting Venezuela, as he proposed doing on his recent trip to South America, he turned his attention to the small islands of Aruba, Bonaire, and Curação off the Venezuelan coast. The restricted fauna of these islands is of course less attractive to the collector than the rich life of the mainland forests, which is doubtless the reason, as Mr. Hartert states, for their comparative neglect by naturalists. We may be thankful, therefore, that they have at last been thoroughly explored by an experienced collector. The results of this exploration have in part been announced in the Bulletin of the British Ornithologists' Club for 1892 and 1893, where Eucthia sharpei, Myiarchus brevipennis, Conurus arubensis, and Amazona rothschildi, all slightly differentiated insular forms, were described. To these Columbigatlina passerina perpallida is now added, and a plate of A. rothschildi is given.

Aruba, sixteen miles from Cape San Roman, is the nearest of the three islands to the continent. Mr. Hartert gives a list of twenty two landbirds and eighteen water-birds as a result of his observations in this island. Amazona canifrons (Lawr.) from Aruba is considered to have been based on an example of A. ochroptera (Gm.) "with a dirty forchead." A plate is given of the latter species. Mr. Hartert states that in Icterus xanthornus curasaocnsis the black tail is assumed "by changing colour, not by moult, as two of my specimens clearly show." It is to be regretted

¹ Die Vögel der Insel Curaçao nach einer von Herrn Cand. theol. Ernst Peters daselbst angeleten Sammlung bearbeitet von Hans von Berlepsch. Journ. für Orn., January, 1892, pp. 61-104. Die Vögel Curaçaos. Nach meinen Journalnotizen vom 21. August bis 5. Sept. 1890. Von Ernst Peters Th. C. *Ibid.*, pp. 104-122.

² On the Birds of the Islands of Aruba, Curação, and Bonaire. By Ernst Hartert. Ibis, July, 1893, pp. 289-338, pll. viii, ix,

that he did not describe these two specimens which "clearly show" what large series of specimens of allied species have previously failed to prove.

From Curação Mr. Hartert records twenty-eight species of land-birds and eleven of water-birds, being all that have been identified with certainty from this island.

The relationships of the *Enethia bicolor* group are here discussed at length, and four forms are recognized,—*bicolor*, from the Bahamas and Lesser Antilles; *marchi* from Jamaica, San Domingo and Barbados [?]; *sharpei* from Aruba, Curação, and Bonaire, and *ommisa* from Colombia, Venezuela, and Tobago.

Bonaire, the third island to be visited by Mr. Hartert, is described as the "most oceanic of the three" and "generally more wooded than the other three." Twenty-three species of land-birds and fifteen species of water-birds were found on this island. The occurrence here of the West Indian Margarops fuscatus and Ammodramus savannarum is among the most interesting of Mr. Hartert's discoveries.

He concludes by calling attention to the "striking affinities between the avifauna of these islands and that of the islands of St. Thomas and St. Croix (Virgin Islands), but no similarity to that of the Windward Islands." These facts, Mr. Hartert thinks, "seem to point to the theory that the Virgin Islands and the Islands of Bonaire and Curação were formerly connected in some way, or that they are of the same geological age, and not of the same age as the Windward Islands." He adds: "Perhaps there was once a line of islands (similar to that of the Lesser Antilles) reaching from St. Thomas through 'Los Aves,' or the Bird Island, by way of Blanca, Orchilla, Grand Cay, Los Roques, and the second group called 'Los Aves,' to Bonaire and Curação." It seems to us, however, that the facts of the case are too unimportant to justify Mr. Hartert's reckless island-building in the great depths of the Caribbean Basin. The islands off the Venezuelan coast are oceanic and their avifauna like that of most oceanic islands is in part due to purely fortuitous circumstances. Accidental visitors which would stand little chance of surviving in more thickly populated regions here find an isolation favorable to their existence. Their presence is thus not necessarily to be accounted for by actual geographical connection with the habitat of their nearest allies. Again similar causes may produce similar results. The Bahaman Geothlypis finds its nearest relative in the Lower Californian species, but there is no reason to doubt that it was derived from the Florida form from which it has changed in the direction of the western species. Most of the West Indian species occurring on Aruba, Bonaire, and Curação are found as slightly differentiated races in the Windward Islands, and it is quite possible that some of them have been derived from this source and subsequently have become changed to forms more closely resembling those found in the Virgin Islands.

Furthermore, as oceanic islands of apparently great age (Mr. Hartert suggests that they may be older than the Windward Islands), it is not

improbable that these small islands, like the West Indies themselves, should now have species resident upon them which were originally derived from the mainland where they have since yielded to the continental struggle for existence and given place to better adapted forms. *Margarops* on Bonaire is a case in point; *Spindalis* on Cozumel is perhaps a similar instance.—F. M. C.

Newton's Dictionary of Birds, Part I.1-The scope of this highly useful and important work is thus defined by its principal author: "Those who may look into this book are warned that they will not find a complete treatise on Ornithology, any more than an attempt to include in it all the names under which birds, even the commonest, are known. Taking as its foundation a series of articles contributed to the ninth edition of the 'Encyclopædia Britannica,' I have tried, first, to modify them into something like continuity, so far as an alphabetical arrangement will admit; and, next, to supplement them by the intercalation of a much greater number, be they short or long, to serve the same end. . . . In the difficult task of choosing subjects for additional articles, one of my main objects has been to supply information which I know, from enquiries often made of me, to be greatly needed." The selection of names to be inserted, says the author, has been quite arbitrary, such compound names as Crow-Shrike, Crow-Titmouse, Shrike-Crow, Titmouse-Thrush, and the like, having been excluded, as well as "a vast number of local names of even British Birds," while such names as Caracara, Koel, Mollymawk, Tomfool, etc., which occur more or less frequently in books of all sorts, but especially in works of travel, are included. Those of course who are familiar with the character of the ornithological matter in the Encyclopædia Britannica' need not be told that the work is not made up simply of bird names and their definitions, but includes the whole range of ornithology, embracing the anatomy of birds, their classification, their geographical distribution and much purely biographical matter, as will be noted later.

In respect to the authorship of the work, we are told that the anatomical portions are mainly contributed by Dr. Gadow, and that they bring, in the opinion of the principal author, "the anatomical portion to a level hitherto unattained in any book that has appeared." "For other contributions of not less value," says Professor Newton, "I have to thank my old pupil Mr. Lydekker, my learned colleague Professor Roy, and my esteemed correspondent Dr. Shufeldt, formerly of the United States Army."

¹ A Dictionary of Birds. By Alfred Newton. Assisted by Hans Gadow. With Contributions from Richard Lydekker, M. A., F. G. S., Charles S. Roy, M. A., F. R. S., and Robert W. Shufeldt, M. D., late United States Army. Part I (A-Ga). London, Adam and Charles Black, 1893. 8vo., pp. viii, 304, map, and numerous illustrations in the text.